



TOM TINDALL
Director

County of Los Angeles INTERNAL SERVICES DEPARTMENT

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"To enrich lives through effective and caring service"

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November 15, 2011

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

REQUEST FOR APPROVAL TO ACQUIRE COMPUTER EQUIPMENT (ALL DISTRICTS - 3 VOTES)

CIO RECOMMENDATION:

(X) APPROVE () APPROVE WITH MODIFICATION () DISAPPROVE

SUBJECT

Request approval to acquire computer equipment with a unit cost greater than \$250,000 to meet the needs of County departments.

IT IS RECOMMENDED THAT YOUR BOARD:

Authorize the Internal Services Department (ISD) to acquire computer equipment for a total financed expenditure of \$7,714,920, to support County-wide automated applications.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

On an ongoing basis, ISD acquires data processing equipment to meet the computer application needs of County departments. Pursuant to County Policy, Board approval is required when individual components of this equipment exceed \$250,000.

This request is for approval to acquire computer equipment for ISD at a total acquisition cost including financing of \$7,714,920 as follows:

- Acquire three (3) large capacity IBM pSeries midrange servers to expand ISD's consolidated Unix hosting service at the Downey and Local Recovery (LRC) data centers. Existing customers to be consolidated onto these servers include: eCAPS/eHR, Information Systems Advisory Board, District Attorney, and Probation. The total financed cost of these servers is \$1,801,330.
- Acquire one (1) large capacity EMC disk storage array to meet the requirements for disaster recovery at the LRC data center and to replace an old storage array at the LRC to prevent incurring \$900,000 in additional yearly equipment maintenance costs. The total financed cost of this array is \$2,702,440. This acquisition will result in a net 5-year savings estimate of \$1,393,936 due to reduced annual equipment maintenance expenses.

ADOPTED

BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

17 November 15, 2011

Sachi A. Hamai
SACHI A. HAMAI
EXECUTIVE OFFICER

- Acquire two (2) large capacity EMC disk storage arrays to meet the requirements for additional storage capacity required for new Hosted Virtual Desktop (HVD) users at the Downey and LRC data centers. The total financed cost of these arrays is \$1,823,940.
- Acquire two (2) large capacity EMC data backup appliances to meet the requirements for additional data backup storage capacity required for Windows and Linux servers at the Downey and LRC data centers. The total financed cost of these appliances is \$1,387,210.

Implementation of Strategic Plan Goals

The acquisition of this computer equipment is necessary to meet the information technology requirements of the departments served by ISD and supports the County strategic goal for Operational Effectiveness.

FISCAL IMPACT/FINANCING

Equipment acquisitions will be financed purchases as follows:

Equipment	Base Purchase Cost	FY 11-12 (6 Months) Lease Costs	Annual/Future Lease Costs	Term	Total Financed Costs
IBM Large Capacity Midrange Servers	\$1,496,880	\$180,133	\$360,266	5 Yrs	\$1,801,330
EMC Disk Storage (Disaster Recovery)	\$2,245,685	\$270,244	\$540,488	5 Yrs	\$2,702,440
EMC Disk Storage (HVD)	\$1,515,666	\$182,394	\$364,788	5 Yrs	\$1,823,940
EMC Disk Storage (Windows/Linux Servers)	\$1,152,750	\$138,721	\$277,442	5 Yrs	\$1,387,210
Total	\$6,410,981	\$771,492	\$1,542,984		\$7,714,920

The above acquisitions will be financed through LAC-CAL over five years. These items are included in the equipment listing that your Board has authorized for LAC-CAL financing in the Fiscal Year (FY) 2011-12 budget. ISD has adequate funding for the lease costs in its FY 2011-12 Adopted Budget, and will request funding in future fiscal years' budget requests. ISD recovers all these costs through usage-based charges to client departments. No additional net County cost (NCC) is required for these acquisitions.

Honorable Board of Supervisors
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FACTS AND PROVISIONS/LEGAL REQUIREMENTS

This request complies with the County Equipment Policy that your Board approved on October 16, 2001. This policy requires that departments obtain Board approval to purchase or finance equipment with a unit cost of \$250,000 or greater. The County's Chief Information Officer reviewed the request and recommends approval (CIO Analysis attached).

CONTRACTING PROCESS

These equipment items are commodity acquisitions under the statutory authority of the County Purchasing Agent. The acquisitions will be competitively bid by the Purchasing Agent in accordance with the standard County Purchasing policies and procedures.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

Your approval will ensure that ISD can acquire the resources necessary to operate County computer systems managed by the Department.

CONCLUSION


The Executive Office, Board of Supervisors, is requested to return one stamped copy of the approved Board letter to the Director, ISD.

Respectfully submitted,

Reviewed by:



TOM TINDALL
Director



RICHARD SANCHEZ
Chief Information Officer

TT:DC:SD:rc
Attachments

c: Chief Executive Office
County Counsel
Executive Officer, Board of Supervisors

CIO ANALYSIS

REQUEST FOR APPROVAL TO ACQUIRE COMPUTER EQUIPMENT

CIO RECOMMENDATION: ☒ APPROVE ☐ APPROVE WITH MODIFICATION
☐ DISAPPROVE

Contract Type:

☐ New Contract ☐ Contract Amendment ☐ Contract Extension
☐ Sole Source Contract ☒ Hardware Acquisition ☐ Other

New/Revised Contract Term: Base Term: N/A Yrs # of Option Yrs

Contract Components:

☐ Software ☒ Hardware ☐ Telecommunications
☐ Professional Services

Project Executive Sponsor: Tom Tindall, Director, ISD

Budget Information :

Y-T-D Contract Expenditures	\$ 0
Requested Contract Amount	\$7,714,920
Aggregate Contract Amount	\$7,714,920

Project Background:

Yes	No	Question
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is this project legislatively mandated?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is this project subvented? If yes, what percentage is offset?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is this project/application applicable to (shared use or interfaced) other departments? If yes, name the other department(s) involved. The equipment will be used by ISD to provide computing services to all departments.

Strategic Alignment:

Yes	No	Question
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is this project in alignment with the County of Los Angeles Strategic Plan?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is this project consistent with the currently approved Department Business Automation Plan?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the project's technology solution comply with the County of Los Angeles IT Directions Document?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the project technology solution comply with the preferred County of Los Angeles IT Standards?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	This contract and/or project and its milestone deliverables must be entered into the Information Technology Tracking System (ITTS).

Project/Contract Description:

In compliance with County policy, the Internal Services Department (ISD) is requesting Board authorization to purchase computer equipment products each unit exceeding \$250,000. The equipment will add three midrange servers, three disk storage units, and two data backup units to the County data centers.

Background:

ISD's computer purchase involves four major components:

Consolidation of Midrange Servers

The purchase of three IBM Power 7 p770 servers consolidates existing workloads running on seven IBM p570 and p595 servers. These new servers use the latest operating system software to enable a higher level of server virtualization and break the traditional model of buying separate physical servers for every customer. The annual cost of the lease is \$360,000, and the purchase is estimated to provide maintenance savings of \$98,000 yearly due to reducing the number of physical servers.

Replacement of Disk Storage

The purchase of a 320TB EMC vMax disk storage unit replaces an obsolete 300TB DMX3 disk storage unit at the Local Recovery Center (LRC) in Santa Ana. This disk storage will support general requirements for hosted server workloads. There is an overall savings of \$1,393,936 to replace the existing equipment, due primarily to avoidance of \$4,200,000 in equipment maintenance costs.

Expansion of Disk Storage

The purchase of two 72TB EMC VNX7500 disk storage units supports expansion of the hosted virtual desktop workloads. Two identical units will be purchased to permit the data to be replicated from the Downey Data Center to LRC.

Expansion of Disk Storage for Data Backup

The purchase of two 72TB EMC Data Domain DD880 units supports backup and restore of hosted servers in the data center. Two identical units will be purchased to permit the data to be replicated from the Downey Data Center to the LRC.

Project Justification/Benefits:

These purchases will realize significant annual savings in equipment maintenance costs and provide a more energy-efficient operating platform. Also, this equipment will accommodate the growth in the use of County enterprise services and systems, including E-Mail, hosted virtual desktops, eCAPS/eHR, and the ECM central infrastructure.

The existing seven IBM servers are over five years old, purchased in 2005 and early 2006, and are approaching obsolescence. ISD will consolidate onto three IBM Power 7 servers, which are over twice as powerful as the existing servers, and can also reduce costs through energy efficiency and virtualization. ISD's new hosting model for midrange servers, which is in line with the hosting models for mainframe and Windows servers, eliminates the need for customers to separately budget for initial procurement of servers. Monthly hosting costs will rise slightly, but will be mitigated by server virtualization savings and the elimination of hardware refresh costs.

This acquisition will allow ISD to replace 300TB of existing EMC DMX3 storage equipment and increase storage capacity slightly to 320TB when upgrading to the EMC vMax disk storage and will reduce storage usage rates because buying the new equipment is more cost effective than the existing equipment maintenance costs.

Project Metrics:

The computer server and storage projects will be considered complete when the new hardware has been installed and all operational systems have been verified for production release in the ISD data centers.

Impact on Service Delivery or Department Operations, if Proposal is Not Approved:

The ability to acquire hardware with supported maintenance is critical to the County in order to provide reliable and accessible data to its citizens and to other government agencies.

Not purchasing the three midrange servers for consolidation will cost the County \$133,000 annually in potential savings. Replacing the existing servers will save \$98,000 annually in lower maintenance costs and saves another \$35,000 annually due to reduced power usage.

Failure to acquire the disk storage and data backup units will prevent ISD from providing services to new email and hosted virtual desktop customers, as well as impact the delivery of storage and data backup services to existing server hosting customers.

Alternatives Considered:

Different server and storage upgrade alternatives have been reviewed in detail to determine the most cost effective purchase options. The computer equipment is available from numerous original equipment manufacturers and distributors and the purchases will be competitively bid.

Project Risks:

Minimal risks exist for the installation of the new equipment because of compatibility with the existing servers and infrastructure. The Chief Information Security Officer (CISO) reviewed the request and did not identify any security risks or issues.

Risk Mitigation Measures:

Proper planning and careful implementation activities will be established to minimize risk. In addition, a performance validation will be conducted to ensure that County applications can be supported.

Financial Analysis:

There is no additional Net County Cost associated with this request. All costs are offset by billing to County departments through composite billing rates of computer utilization.

CIO Concerns:

None.

Recommendations:

The Chief Information Office recommends approval by the Board.

CIO APPROVAL

Date Received: 10/17/2011

Prepared by: Tom Travis

Date: 11/01/2011

Approved: 

Date: 11/01/2011